disclosed in U.S. Patent No. 5,404,713.

The plurality of circumferentially disposed hollow struts 208 are in fluid communication with and operable to receive air from the FLADE duct 3. The hollow struts 208 structurally support and flow air to the centerbody 72 which is substantially hollow. A variable area FLADE air nozzle 213 includes an axially translatable plug 172 which cooperates with a radially outwardly positioned fixed nozzle cowling 174 of the centerbody 72 to exhaust FLADE airflow 80 received from the hollow struts 208 and return work to the engine in the form of thrust.

FIGS. 2, 3, 6, and 7 illustrate a nozzle cooling arrangement in which at least some of the FLADE airflow 80 is used as cooling air 251 which flowed through the hollow struts 208 into the substantially hollow centerbody 72. The cooling air 251 is then flowed through cooling apertures 249 in the centerbody 72 downstream of the variable throat area A8 to cool an outer surface of the centerbody. Some of the FLADE airflow 80 may also be used as cooling air 251 for cooling the radially annular outer wall 220 of the engine nozzle 218 downstream of the variable throat area A8 in the same manner. Cooling of the annular outer wall 220 and the hollow centerbody 72 is helpful when thrust augmenting afterburners 224, such as those illustrated in ~~FIG~~ Fig. 7, aft and downstream of the aft FLADE turbine 160 are ignited. The apertures may be angled to provide film cooling along the centerbody 72 and/or the hollow struts 208. Holes, shaped and angled holes, and slots and angled slots are among the types of cooling apertures 249 that may be used.

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The augmenter includes an exhaust casing 231 and liner 234 within which is defined a combustion zone